Application No: 10/595,827 Attorney's Docket No: DE030389 [PHLP 1502]

Reply to non-final Office Action of July 20, 2010

## Remarks / Discussion of Issues

In the non-final Office Action dated July 20, 2010, it is noted that claims 1 and 3-19 are pending, and stand rejected. Claims 1, 6, and 11 are independent claims. Claims 3-5 and 16-19 depend ultimately from claim 1; claims 7-10 depend from claim 6; and claims 12-15 depend from claim 11. Claim 2 was previously canceled.

## Cited Art

Cited art in this response includes US Patent 7,321,762 to Hoeben ("Hoeben"), US Patent 4,704,716 to Bowers et al. ("Bowers"), IEEE Standard for Information Technology 802.11 (1999) "Part 11:Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: High-speed Physical Layer in the 5GHz Band" ("802.11-1999"), US Patent 7,272,1566 to Shoemake et al. ("Shoemake"), US Patent 7,415,046 to Beckman et al. ("Beckman"), US Patent 7,289,529 to Sherman ("Sherman"), and US Patent Publication 2005/0111402 to Sawada et al. ("Sawada").

## Rejections under 35 U.S.C. §103

Claims 1, 3-10, 17, and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hoeben in view of Bowers and 802.11-1999.

Applicants' claim 1 recites in part,

". . . determining on each channel of the at least two channels that are an object of channel grouping whether each channel <u>is one of either idle or that a back-off by the multi-channel device is underway</u>. . . ." Emphasis added.

The Office Action admits that Hoeben does not disclose the feature of determining on each channel of the at least two channels that are an object of channel grouping whether each channel is one of either idle or that a back-off by the multi-channel device is underway and relies on Bowers at column 8, line 61-column 9, line 29 for allegedly disclosing this feature. Applicants respectfully traverse this argument.

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On page 5, the Office Action points to Bowers at col. 8, line 61 through col. 9, line 29 for teaching a stored program-controlled central processor which allegedly determines when a channel in a selected group is not in an idle state. The Office Action therefore concludes that Bowers teaches the feature of determining on each channel of the at least two channels that are an object of channel grouping whether each channel is one of either idle or that a back-off by the multi-channel device is underway. Applicants respectfully assert that Bowers cannot be relied upon to teach this feature of claim 1 because Bowers is limited to determining if a channel is in an idle state. However, Bowers clearly does not determine whether a back-off by the multi-channel device is underway. As such, Bowers cannot teach or suggest determining on each channel of the at least two channels that are an object of channel grouping whether each channel is one of either idle or that a back-off by the multi-channel device is underway.

In view of the rejection to claim 1 it appears that the Office considers that the feature of "determining on each channel of the at least two channels that are an object of channel grouping whether each channel is one of either idle or that a back-off by the multi-channel device is underway" is an alternative limitation under MPEP 2173.05(h) and therefore can properly reject claim 1 based solely on Bowers' alleged teaching of determining if a channel is in an idle state. Applicants respectively traverse such line of reasoning.

Under MPEP 2173.05(h), an acceptable form of alternate expression is a Markush group, which recites members as being <u>selected</u> from the group consisting of A, B, or C. However, the feature of claim 1 of determining on each channel of the at least two channels that are an object of channel grouping whether each channel is one of either idle or that a back-off by the multi-channel device is underway cannot be treated as an alternative limitation under MPEP 2173.05(h). In other words, this feature of claim 1 does not encompass a selection. Rather, claim 1 requires <u>determining</u> whether each channel <u>is one of either</u> idle or that a back-off is underway. Neither Hoeben nor Bowers, separately or in combination, discloses or suggests the feature of determining whether a channel is one of either idle or that a

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back-off is underway. Therefore, the combination of the cited references cannot determine whether a channel *is one of either* idle or that a back-off is underway.

The cited reference 802.11-1999 was added to Hoeben and Bowers as allegedly disclosing preambles and headers. However, 802.11-1999 does not disclose or suggest the features of claim 1 lacking in the combination of Hoeben and Bowers, as discussed above. Furthermore, the Office Action does not rely on 802.11-1999 for disclosing or suggesting the feature of determining on each channel of the at least two channels that are an object of channel grouping whether each channel is one of either idle or that a back-off by the multi-channel device is underway. Therefore, the combination of Hoeben, Bowers, and 802.11-1999 does not teach or suggest all the limitations of claim 1. Therefore, Applicants respectfully request the withdrawal of the rejection of claim 1 under 35 USC 103(a).

Claims 3-5, 17 and 18 depend from claim 1 and include all the above discussed features of claim 1, plus additional distinguishing features. Accordingly, for at least the above reasons, claims 1 and 3-5, 17 and 18 are patentable over the combination of Hoeben, Bowers, and 802.11-1999.

Applicants' claim 6 recites in part,

"determining that a single one of the scanned channels is <u>one of either idle or that a back-off</u> by the multi-channel device is underway on the single channel,

blocking the single channel <u>determined to be one of either idle or having the back-off underway</u> to other devices by the multi-channel device by transmitting a message..." Emphasis added.

Independent claim 6 is different from claim 1 and must be interpreted according to the specific recited features. Although claims 1 and 6 are different and must be interpreted on their own merits, Applicants apply the above arguments for claim 1 to independent claim 6.

As such, Applicants respectfully submit that claim 6 is allowable over the combination of cited art and respectfully requests the withdrawal of the rejection under 35 U.S.C. 103(a). Claims 7-10 depend from claim 6 and include all the above

discussed features of claim 6, plus additional distinguishing features. Accordingly, for at least the above reasons, claims 7-10 are likewise patentable over the combination of Hoeben, Bowers, and 802.11-1999.

Claims 11-14 stand rejected under 35 U.S.C. §103(a) over Hoeben in view of Bowers, 802.11-1999, and Sherman.

Independent claim 11 is different from claims 1 and 6. For example, claim 11 includes the features of determining on each channel channels of the at least two channels to be called upon for transmission whether each channel is one of either idle or that a back-off by the multi-channel device is underway. Although the claims must be interpreted on their own merits, Applicants apply the above arguments for claim 1 to independent claim 11. Sherman does not cure the deficiencies of the combination of Hoeben, Bowers, and 802.11-1999 as noted above with respect to claim 1. As such, Applicants respectfully submit that claim 11 is allowable over the combination of cited art and respectfully requests the withdrawal of the rejection of independent claim 11 under 35 U.S.C. 103(a). Claims 12-14 depend from claim 11 and include all the above discussed features of claim 11, plus additional distinguishing features. Accordingly, for at least the above reasons, claims 12-14 are patentable over the combination of Hoeben, Bowers, 802.11-1999 and Sherman.

Claim 16 stands rejected under 35 U.S.C. §103(a) over Hoeben, Bowers, 802.11-1999, and Beckman. Claim 19 stands rejected under 35 U.S.C. §103(a) over Hoeben, Bowers, 802.11-1999, and Shoemake. Claim 15 stands rejected under 35 U.S.C. §103(a) over Hoeben, Bowersm, 802.11-1999, Sherman and Sawada.

With respect to the remaining dependent claims, the Office Action cites additional references as noted above. However, each of dependent claims 15, 16 and 19 depends upon an allowable independent base claim and inherits all of the features of the respective independent base claim.

The additional cited references do not cure the deficiencies as noted as applied to the respective independent base claim. Thus, each dependent claim is patentable

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for at least the same reasons discussed above with respect to its independent base

claim, upon which it depends, with each dependent claim containing further

distinguishing patentable features.

Conclusion

An earnest effort has been made to be fully responsive to the Examiner's

correspondence and advance the prosecution of this case. In view of the foregoing, it

is respectfully submitted that all the claims pending in this patent application are in

condition for allowance.

If there are any errors with respect to the fees for this response or any other

papers related to this response, the Director is hereby given permission to charge any

shortages and credit any overcharges of any fees required for this submission to

Deposit Account No. 14-1270.

Respectfully submitted,

/Brian S. Myers/

By: Brian S. Myers

Registration No.: 46,947

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